DISCUSSION WITH HQ ES&H MANAGERS

Environmental, Safety and Health

June 4 ,2002

Dan Kelley
DOE SPR ES&H Director

June 4, 2002

504-734-4721


DOE Strategic Plan
- Objective CM 1
SPR Strategic Plan
- Values
- Success Factors
- Objectives
Annual Performance Plan
- Indicators/Measures
Key Processes
- Work Authorization Directives

DOE Strategic Plan

- **Objective CM 1**

  Ensure the safety and health of the DOE workforce and members of the public, and the protection of the environment in all Departmental activities.

SPR Strategic Plan

- **Value = Social Responsibility**

- **Success Factor for ES&H**

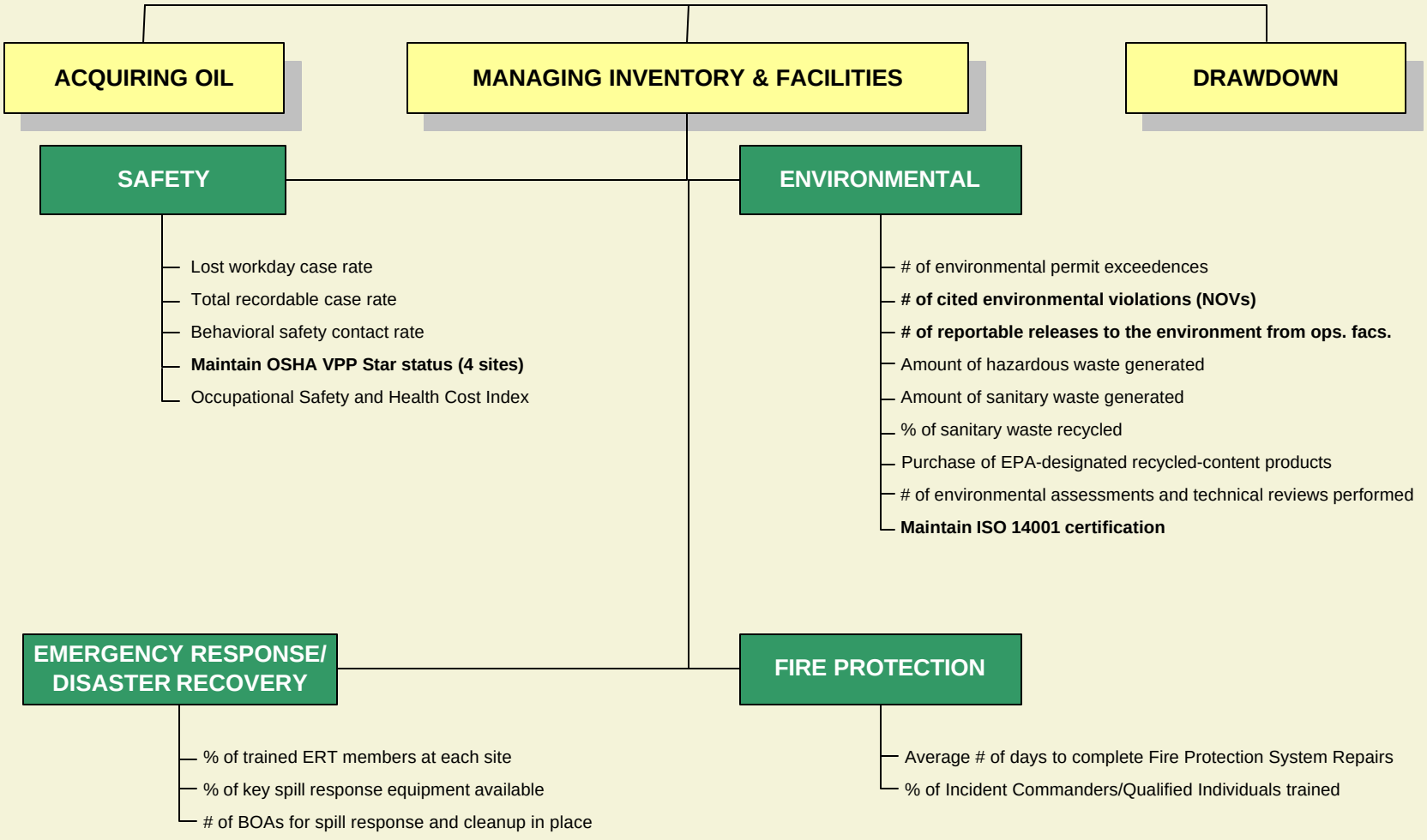
  Protect SPR's Federal and contractor employees, the general public, private and public properties, and the environment from potential hazards.

- **Objectives:**
  - **Ensure environmental protection and pollution prevention.**
  - **Promote a safe work environment.**

SPR Performance Plan

Indicators	Measures
OSHA VPP	Annual Evaluation
Environmental Violations	# of Cited NOVs
Reportable Spills	# of Reportable Releases
ISO 14001	Annual Certificate

KEY PROCESSES AND MEASURES



LINE ACCOUNTABILITY FOR ES&H

ASFE-1
M. Smith

DIRECTOR, ES&H (FE)
C. Zamuda

DAS/PR
R. Furiga

PROJECT MANAGER
W. Gibson

- SPRPMO M 450.1-1 Environmental, Safety and Health Manual
  -- Functional Responsibilities and Authorities Matrix (FRAM)
- SPRPMO M 111.1-1A Organization and Function Manual

ASSISTANT PROJECT MANAGER
MAINTENANCE AND OPERATIONS
J. Kilroy

ASSISTANT PROJECT MANAGER
TECHNICAL ASSURANCE
C. Dobson

SITE OPERATIONS AND MAINTENANCE DIVISION

Director, W. Poarch
Bryan Mound SSR, J. Aguinaga
Big Hill SSR, A. Fruge
West Hackberry SSR, R. Francoeur
Bayou Choctaw SSR, S. Sevak

ENVIRONMENTAL, SAFETY AND HEALTH DIVISION

Director, D. Kelley
Emerg. Mgmt Prog. Mgnr., B. Kahl
Environ. Prog. Mgnr., N. Ellis
Safety Prog. Mgnr., W. Woods
Environ. Specialist, K. Batiste
Safety Specialist, R. Mayeux

Dr. Kirkland Jones
DynMcDermott (DM) ES&H Director

504-734-4051

CHALLENGES

- **Taking Integrated Safety Management (ISM) to the Next Level**
  - Benchmarking Industry “Best of Best”
  - Complete integration of all work, including subcontractors
- **Staying in “Best of Best”**
  - Baseline now is “Best of Best”
  - Challenge to maintain

SPR Business Strategies

Improve productivity safely by using:

- **Best at the SPR**
- **Best in DOE**
- **Best in commercial business**
- **Benchmarking, Internal recognition**
- **External recognition programs**

Adopting Proven Commercial Business Strategies – Innovate or Stagnate

- Gap Analysis
- Benchmark
- Plan
- Prepare for Change
- Implement
- Performance Metrics
- Benchmark again

SAFETY GOALS

- **Continue Pursuit of OSHA Region VI Voluntary Protection Program (VPP) "Star Among Stars" Recognition for an Excellent Accident Record**
  - Star of Excellence – 90% below comparable industries
  - Super Star – 75% below comparable industries
  - Star – 50% below comparable industries

SUCCESSES

- **ISM Validated on SPR, 1999**
- **SPR Star Status for the Four Sites in 2001**
  - Star of Excellence – Big Hill
  - Super Star – Bayou Choctaw, West Hackberry, and Bryan Mound
  - Note: All four sites improved at least one step from last year
  - Only facilities with both DOE/OSHA VPP Status

Management overview of process

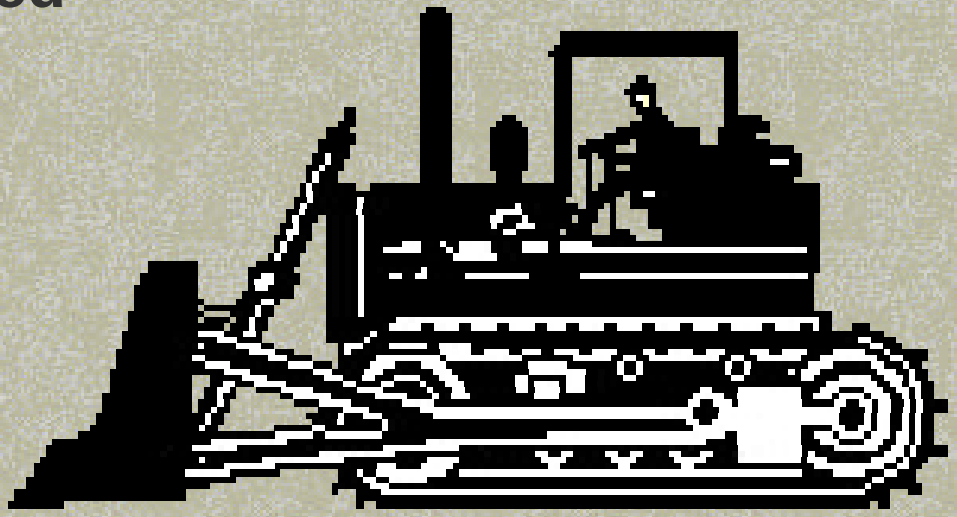
Employee behaviors (actions) are measured (observed) by fellow employees against an established and published list of critical behaviors which the employees themselves developed directly from the site's previous accidents. Continuous, immediate and positive feedback results in reinforcement of safe behaviors. The continuous process changes culture slowly over time. Data used to improve process which provides employee participation, documentation and knowledge transfer.

Employee Behavioral Safety Process

- Implemented to site specific requirements
  - Graded implementation based on worker risk
  - Process not a program- long term real change
  - Process adapted by employees at site- ownership
  - No employee blame
  - Parallels Continuous Quality Improvement process- Same techniques
  - Objective: Site specific, statistically valid risk reduction

Behavioral Safety Is….

- Employee owned
- Data driven
- Proactive
- Positive, sure, fast
- Immediate near-miss intervention
- Anonymous
- Evolves over time



Suzanne Broussard
DM Safety and Health Manager

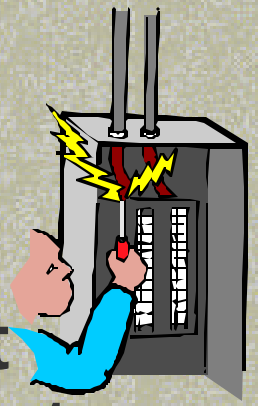
504-734-4833

SPR Behavioral Safety – Site-wide Perspective

- **Researched and wrote proposal – including necessary resources**
- **Implemented, all sites**
- **Process 8 years old**
- **Two sites 100% trained; lowest Total Recordable Cases**
- **2001 – 7,361 observations (19% more than 2000)**
  - 45,678 safe behaviors (10% more than 2000)
  - 2,595 “at risk” behaviors (12% less than 2000

Development of EBSP

- 1994 – initiation of the process
  - Series of near misses
  - 2 high voltage electrical incidents
  - Process Safety Management (PSM) determined applicable to the SPR
  - Personal Protective Equipment standards



Developing EBSP

- Intent
  - Reduced risk & improved compliance
  - Use what we already had
  - Build in continuous improvement
  - Involve and empower employees
  - Predictive, proactive

Developing EBSP

- **Presented proposal to DOE**
  - Manhours
  - Dollars
  - Approved by DOE and DM Project Managers
- **Sole-sourced contract**
  - Developer and patent holder
  - In-house licensed consultants – estimated 53% cost reduction
  - TQM/CQI tie-in

Developing EBSP

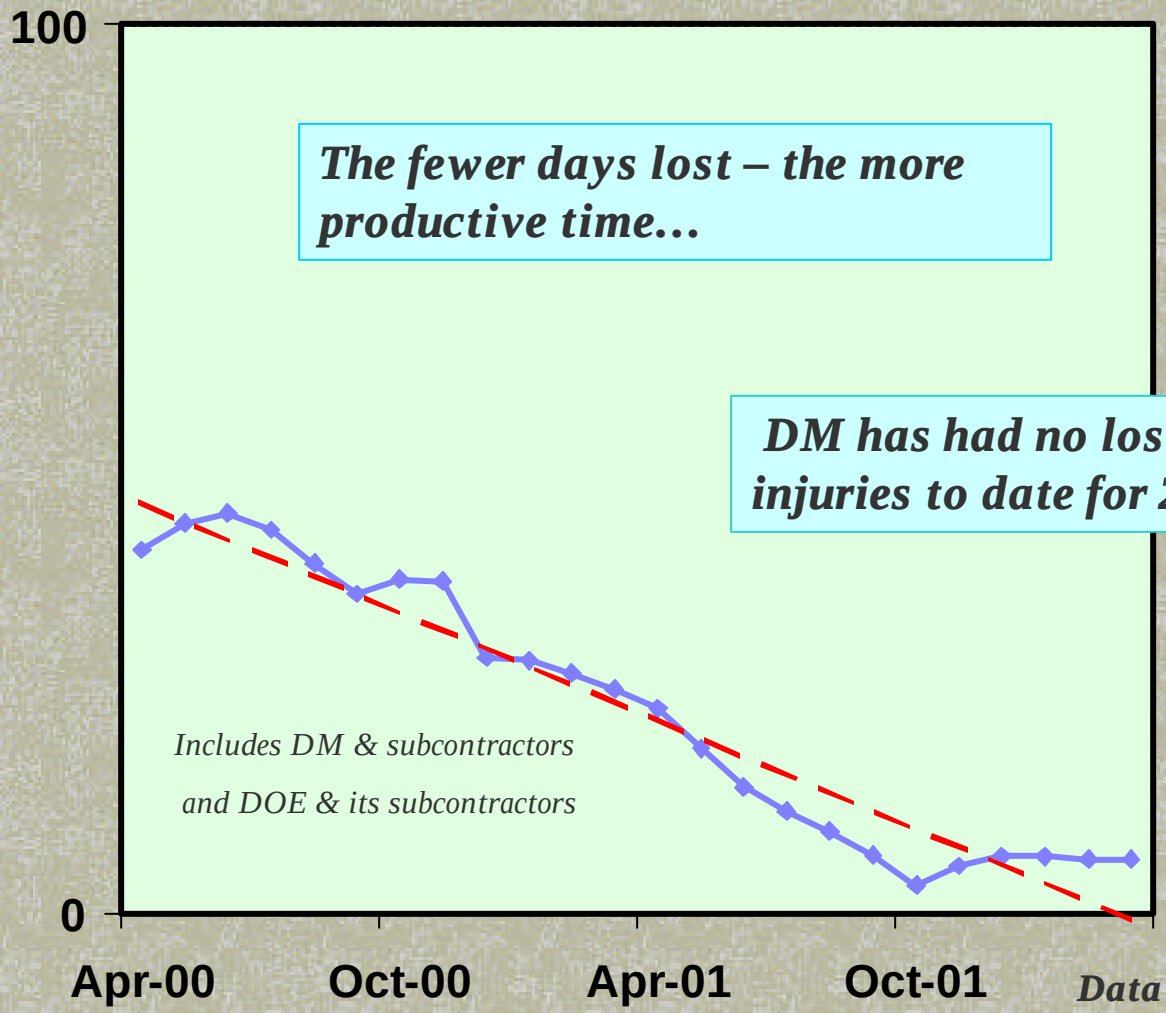
- 1996 first joint facilitators meeting
  - A full year of observations
  - Doubters had become believers
  - Employees were empowered with new skills
  - New leaders had emerged
- 1996 EBSP User Conference
  - DOE and industry participation
- 1996-2002 continued improvement
  - Large statistical base
  - Evolved into other areas as workforce and tasks changed

Productivity Improvements

- **Predictive** performance measures
- Cost avoidance
  - Fewer accidents
  - Best way to do the job
  - Synergy
  - Mentoring
    - DOE
    - Industry – PPG, DOW
    - Networking groups
- Employees own the process
  - Leadership
  - Empowerment

Lost Workday Rate

SPR 24 Month Moving Average*

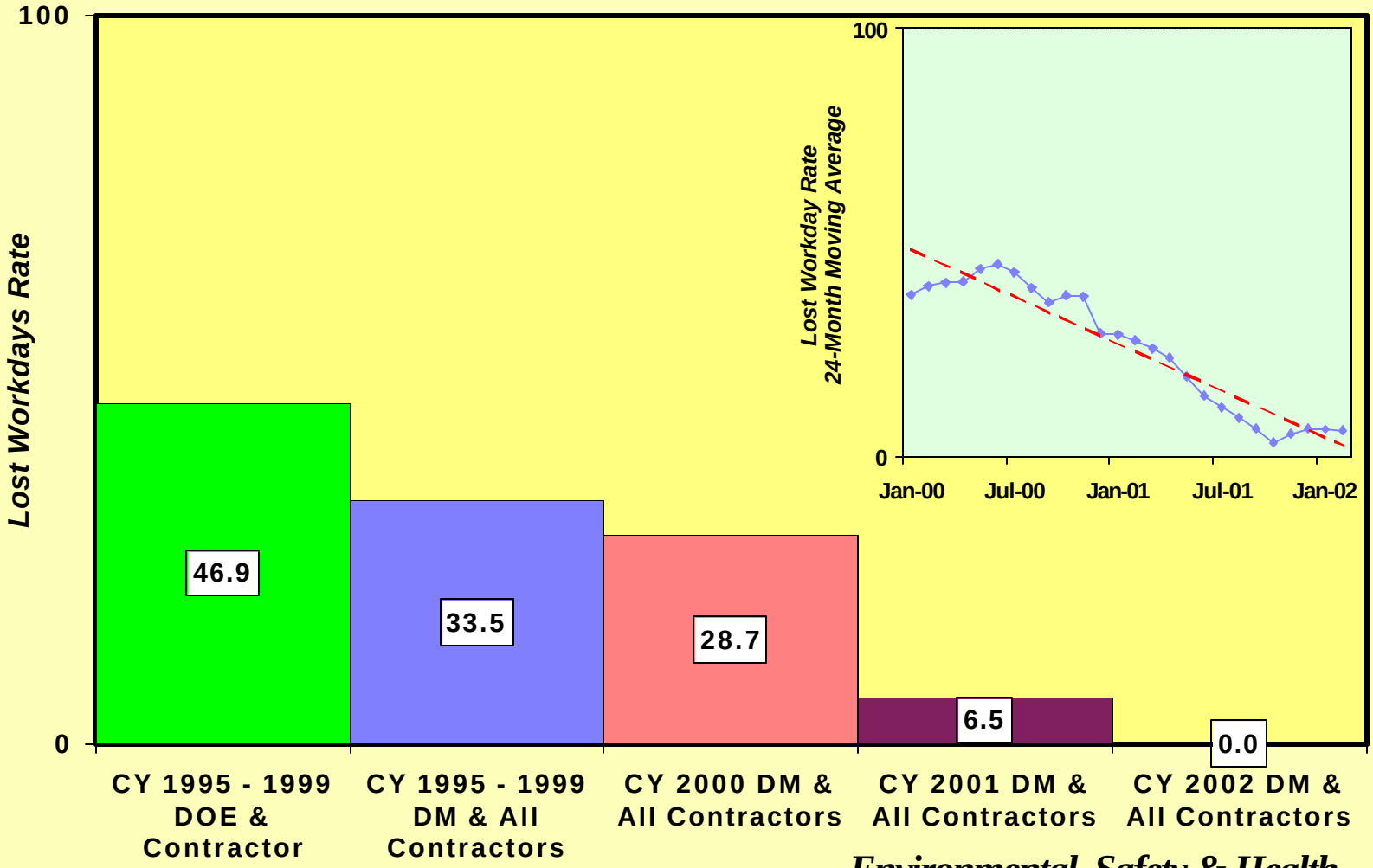


Data through March 2002

Lost Workdays Rate

(Includes DM, & Construction, Service and Security Subcontractors)

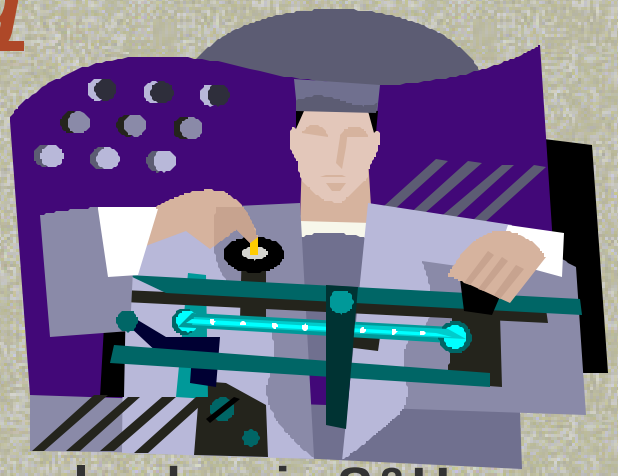
Rate = (Lost Workdays X 200,000) / Work-Hours



Data through February 28, 2001

Environmental, Safety & Health
March 28, 2002

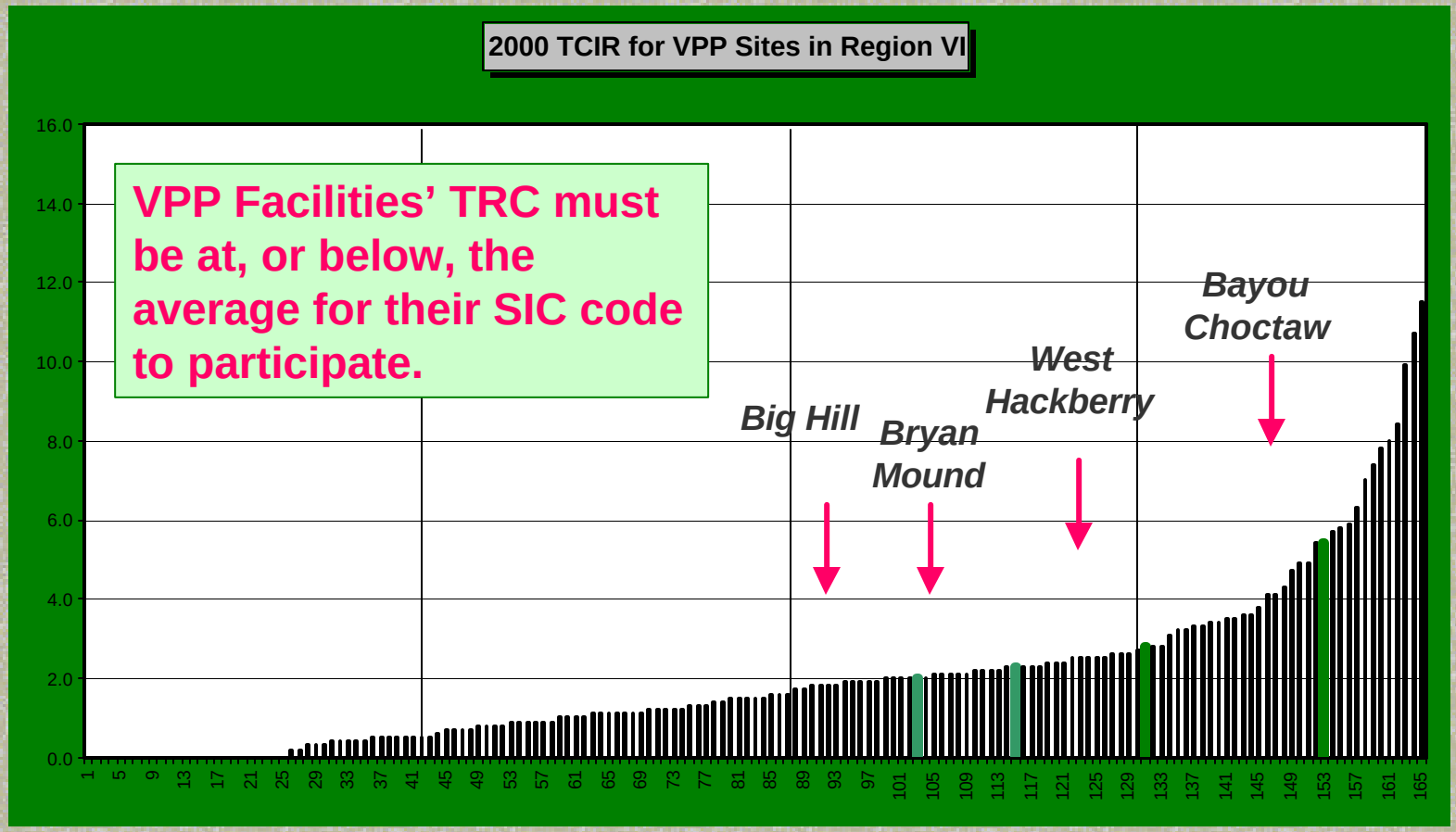
Benchmarking



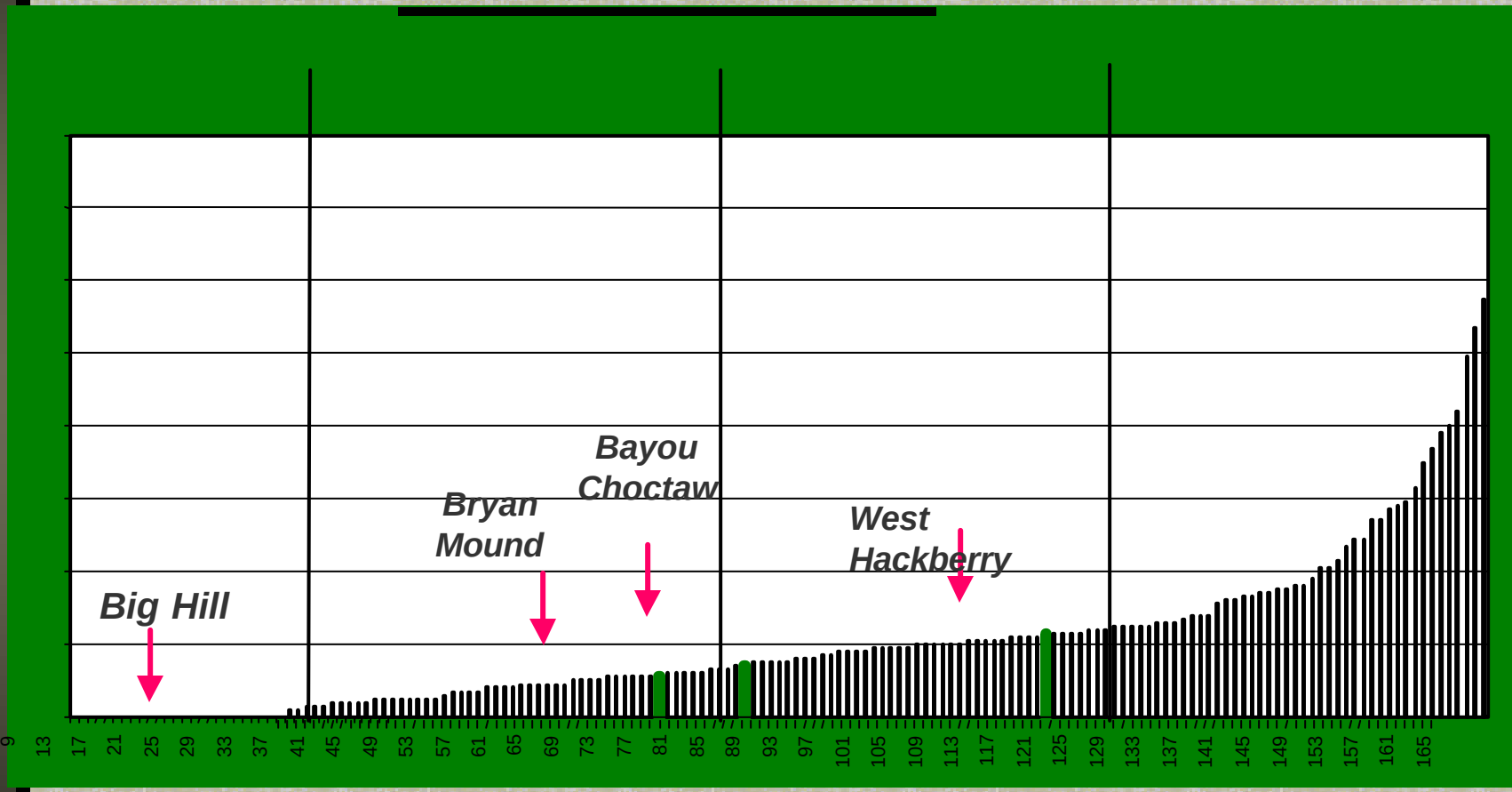
- Within DOE
  - DOE VPP and ISO sites
- With Commercial Business
  - Benchmarking TRC against proven leaders in S&H
- Within VPP
  - Benchmarking TRC against 171 other Region VI sites

ISM + EBSP + Quality Assurance = a sound base for best of class performance

DM Total Recordable Case Rate for 2000 against 171 Region VI VPP Facilities

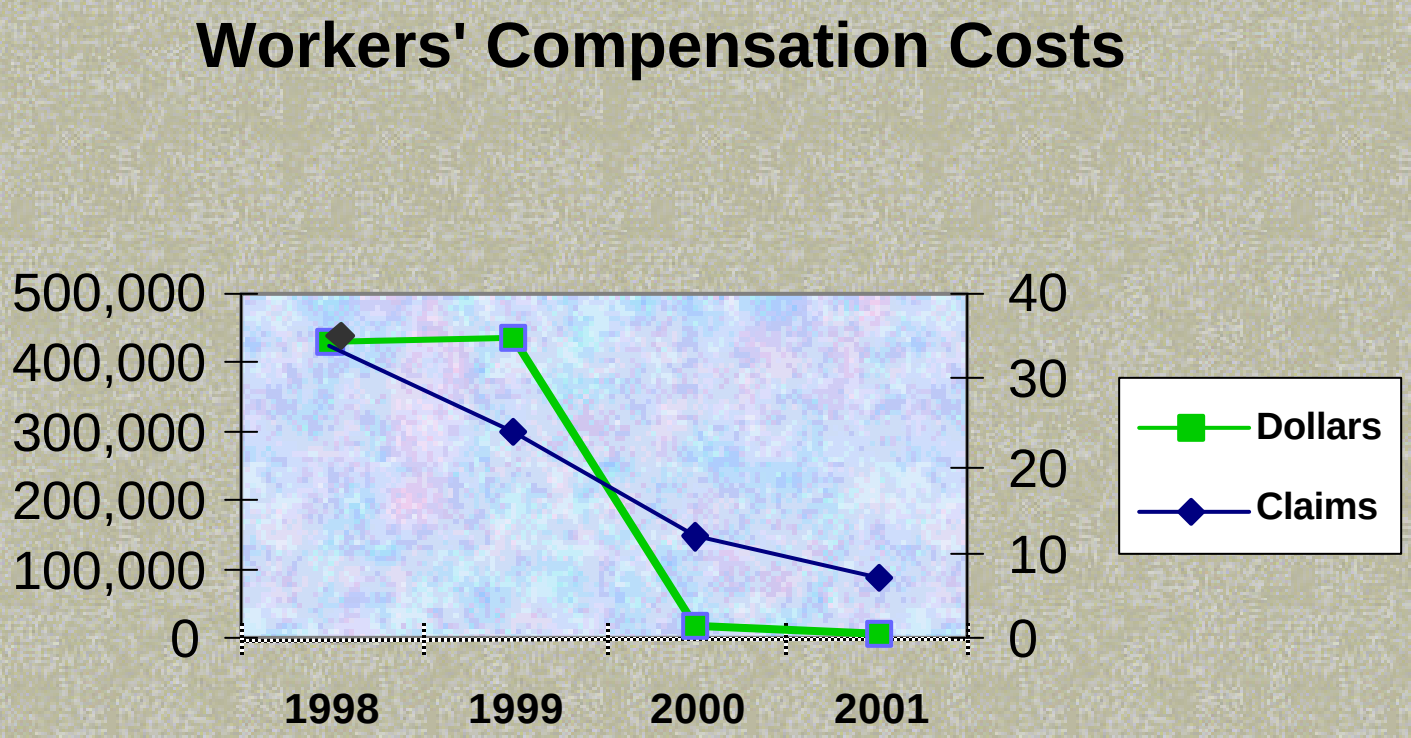


Total Recordable Case Rate for 171 VPP Sites DM 2001 Data against 2000 OSHA Data

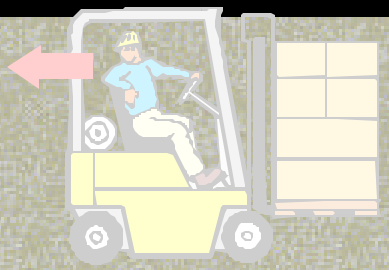


DM TRC

Direct Savings



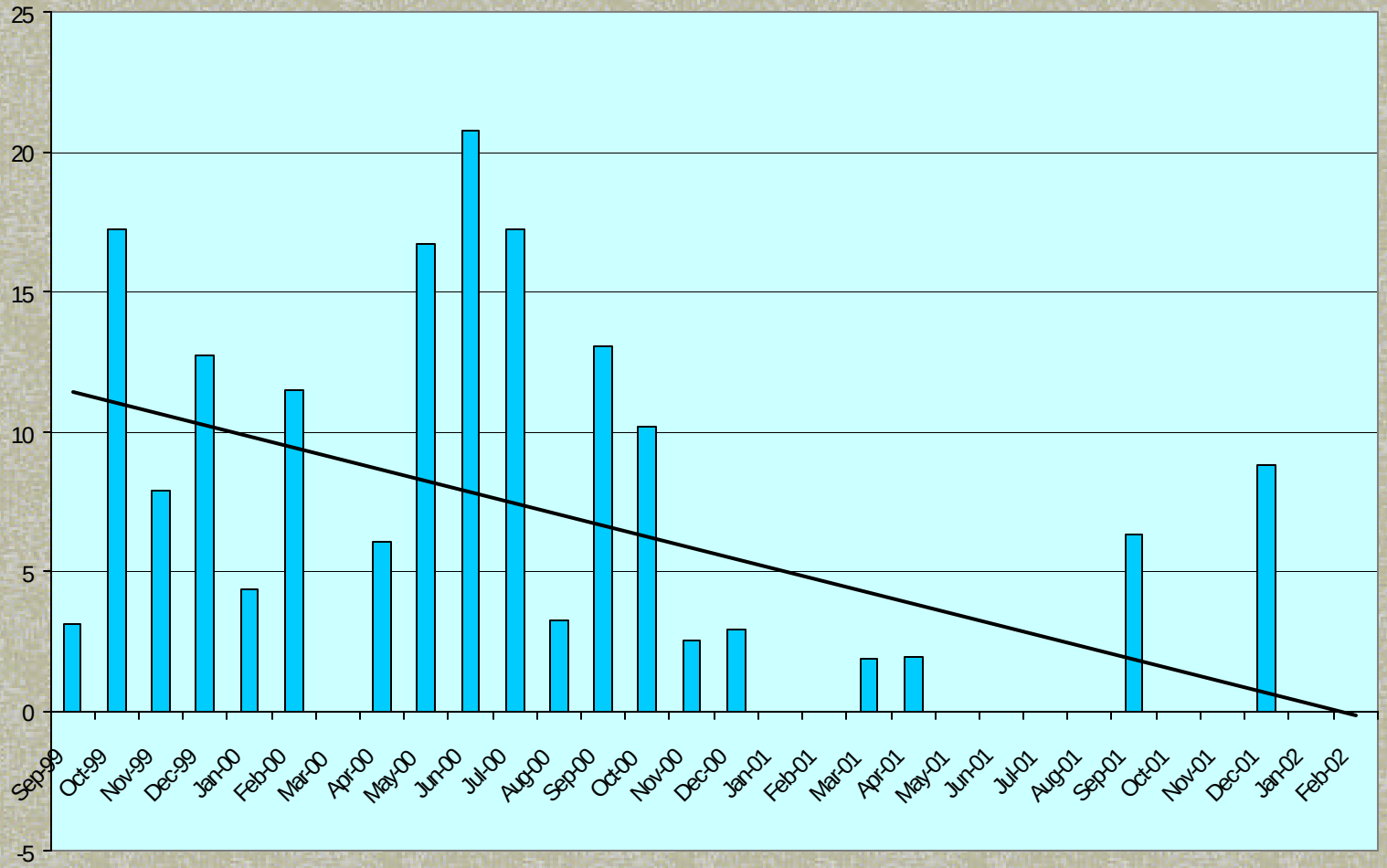
Indirect Savings

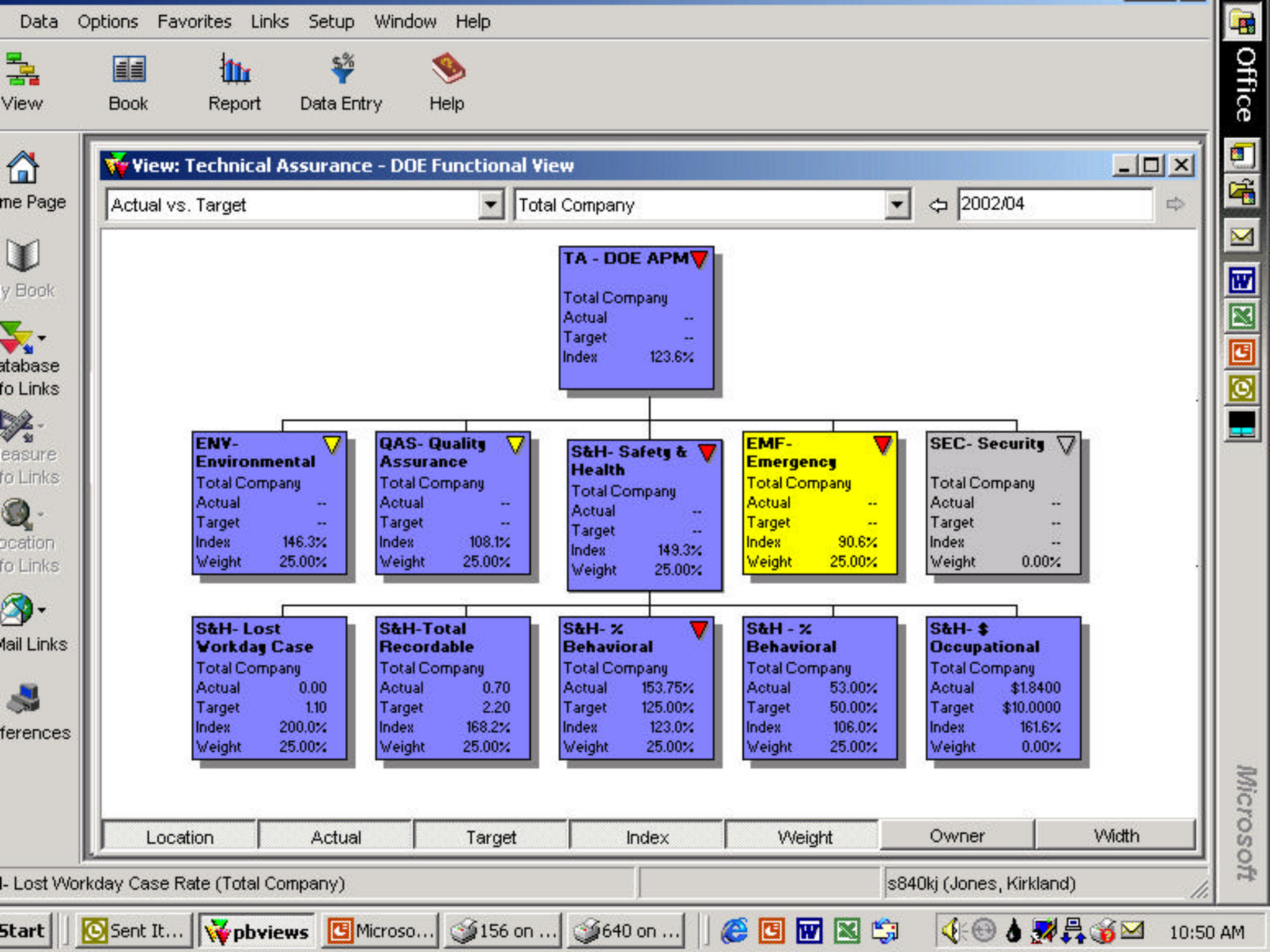


Site	Total Recordable Case Rate (TRC) 2000	Total Recordable Case Rate (TRC) 2001	Percentage Reduced
Bayou Choctaw	4.69	1.66	65%
Big Hill	2.03	0.00	100%
Bryan Mound	2.16	1.12	48%
West Hackberry	2.65	2.18	18%

Occupational Safety and Health Cost Index

(in dollars per 100 hours worked)

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View Book Report Data Entry Help
View: Technical Assurance - DOE Functional View
Actual vs. Target
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2002/04
TA - DOE APM
Total Company
Actual --
Target --
Index 123.6%
ENV- Environmental
Total Company
Actual --
Target --
Index 146.3%
Weight 25.00%
QAS- Quality Assurance
Total Company
Actual --
Target --
Index 108.1%
Weight 25.00%
S&H- Safety & Health
Total Company
Actual --
Target --
Index 149.3%
Weight 25.00%
EMF- Emergency
Total Company
Actual --
Target --
Index 90.6%
Weight 25.00%
SEC- Security
Total Company
Actual --
Target --
Index --
Weight 0.00%
S&H- Lost Workday Case
Total Company
Actual 0.00
Target 1.10
Index 200.0%
Weight 25.00%
S&H-Total Recordable
Total Company
Actual 0.70
Target 2.20
Index 168.2%
Weight 25.00%
S&H- % Behavioral
Total Company
Actual 153.75%
Target 125.00%
Index 123.0%
Weight 25.00%
S&H - % Behavioral
Total Company
Actual 53.00%
Target 50.00%
Index 106.0%
Weight 25.00%
S&H- $ Occupational
Total Company
Actual $1.8400
Target $10.0000
Index 161.6%
Weight 0.00%
Location Actual Target Index Weight Owner Width
- Lost Workday Case Rate (Total Company)
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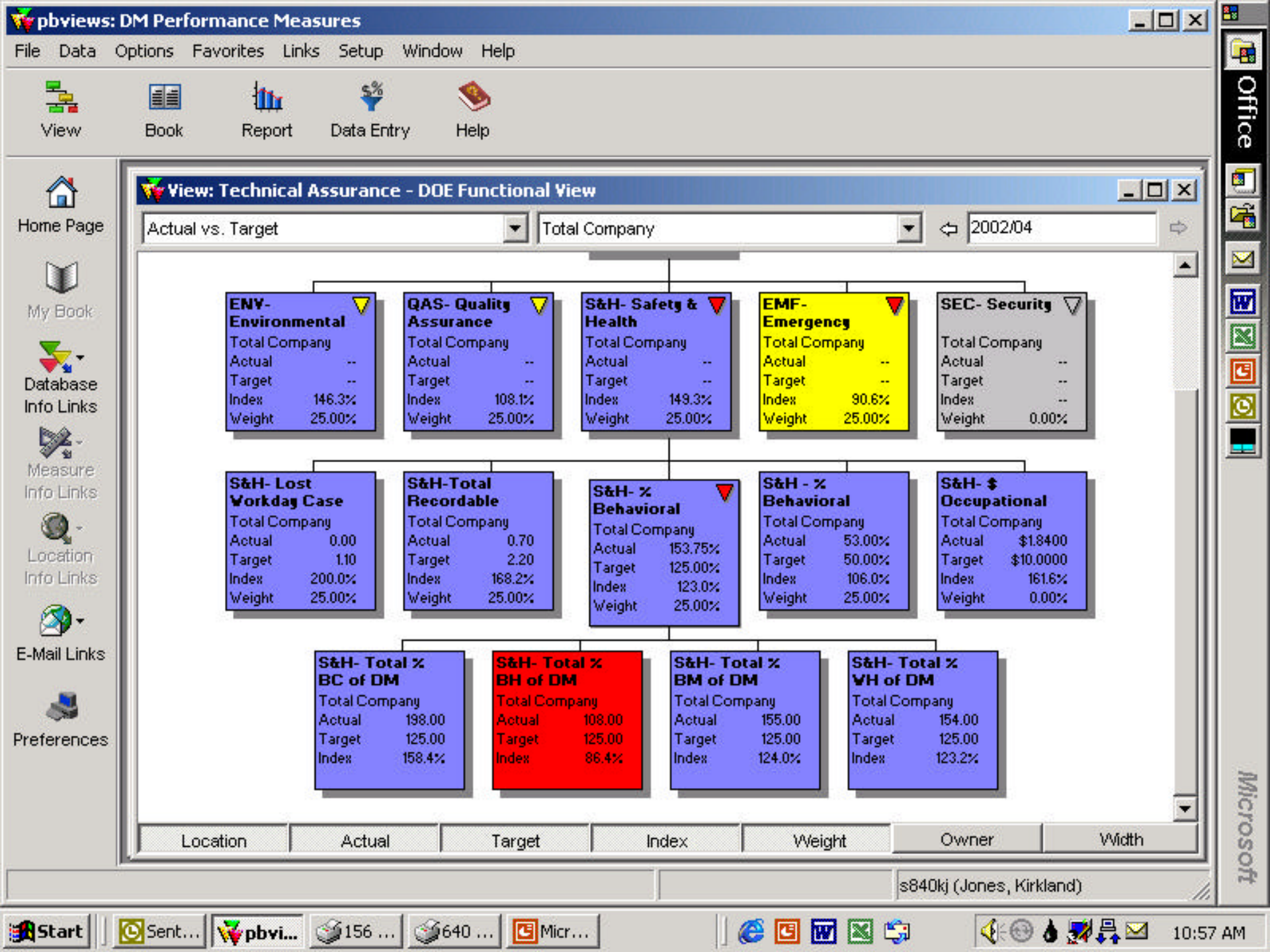
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Home Page
My Book
Database Info Links
Measure Info Links
Location Info Links
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Target --
Index 90.6%
Weight 25.00%
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Target --
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S&H - % Behavioral
Total Company
Actual 53.00%
Target 50.00%
Index 106.0%
Weight 25.00%
S&H- $ Occupational
Total Company
Actual $1.8400
Target $10.0000
Index 161.6%
Weight 0.00%
S&H- Total % BC of DM
Total Company
Actual 198.00
Target 125.00
Index 158.4%
S&H- Total % BH of DM
Total Company
Actual 108.00
Target 125.00
Index 86.4%
S&H- Total % BM of DM
Total Company
Actual 155.00
Target 125.00
Index 124.0%
S&H- Total % VH of DM
Total Company
Actual 154.00
Target 125.00
Index 123.2%
Location Actual Target Index Weight Owner Width
s840kj (Jones, Kirkland)
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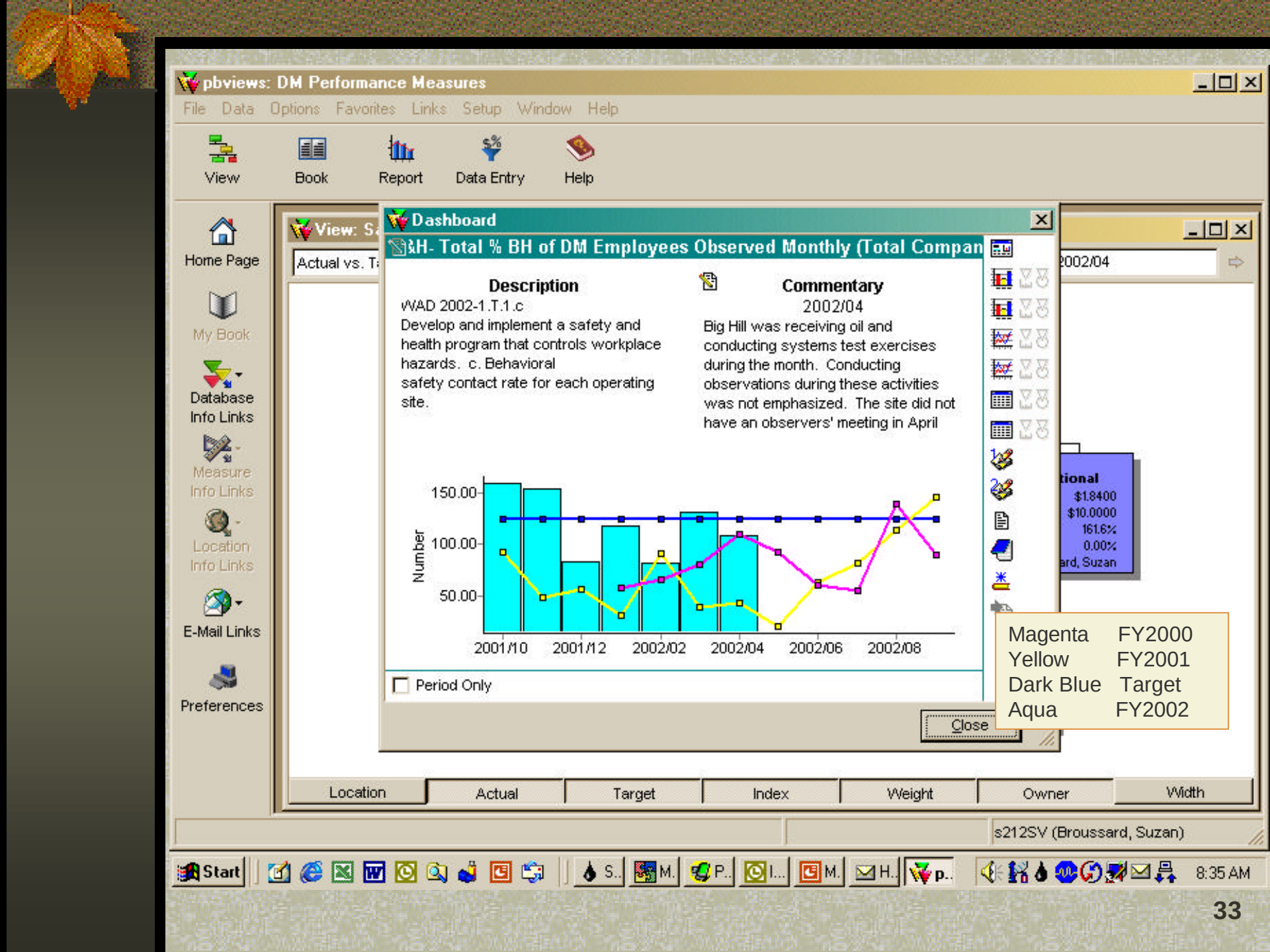
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Measure Info Links
Location Info Links
E-Mail Links
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Dashboard
%H- Total % BH of DM Employees Observed Monthly (Total Compan
Description
WAD 2002-1.T.1.c
Develop and implement a safety and health program that controls workplace hazards. c. Behavioral
safety contact rate for each operating site.
Commentary
2002/04
Big Hill was receiving oil and conducting systems test exercises during the month. Conducting observations during these activities was not emphasized. The site did not have an observers' meeting in April
150.00
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2001/10
2001/12
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Dark Blue Target
Aqua FY2002
Location
Actual
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Weight
Owner
Width
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8:35 AM

Robert Keen
DM Behavioral Safety Facilitator

504-734-4581

Four Essential Elements

1. Identifying Behaviors
2. Gathering Data
3. Providing Feedback
4. Removing Barriers

Guiding Principles

- Process not a Program
- Adaption vs. Adoption
- Employee Involvement
- Don’t Blame the Employee
- Understanding and Buy-In

Barriers to Safe Work

1. Hazard Recognition & Response – Do people know about the hazards and are they able to respond to them to minimize risk?
2. Business Systems – Are the systems in place efficient, reliable, and encourage safe behavior?
3. Rewards and Recognition – What are the formal rewards and recognition and what behaviors to they reinforce?
4. Facility and Equipment – Does the facility or equipment allow safe performance or obstruct it?
5. Disagreement on Safe Practices – Is there agreement between management and workers as to what is safe or “at risk?”

Barriers to Safe Work

6. **Personal Factors –** Does the employee have limitations or impairments

7. **Culture** – What influences people to choose At-risk work practices?

Behavioral Safety?

Myth: If you are doing Observations of behavior, you are doing behavioral Safety.

Truth: Data gathering is just one element of a true BBS system. You need to identify the **critical behaviors** and provide success and guidance feedback. Then you must use this data to **remove barriers** that will lead to continuous improvement.

Process Maintenance

- Select Facilitator
- Select Committee
- Organize the Committee
- Develop Work Plan
- Name the Process
- Define Roles & Responsibilities

- Start Observer Networks
- Monitor Process Quality

- Monitor Quality Improvement Process

Preparation

- Develop CBI
- Develop Data Sheet
- Take Pictures of Behaviors
- Develop Feedback Charts

- Prepare Observer Course
- Trainers Rehearse
- Organize for Kickoff Meeting

- Prepare for Safety Improvement Process

Communication & Training

- Safety Meetings Newsletter
- Training for Managers and Supervisors

- CBI Ownership Meeting
- Recruit Observers
- Train the Observers

Barriers to Implementation

- Impact on first line Supervisors
- Impact on Schedule
- Perceived lack of Management support
- Resistance to change
- Employee's fear of being manipulated
- Punitive use of data

First impression

Would not work

No one would buy in

Another overkill program

Didn't believe the company would let it work like it was suppose to

What's in it for the company?

No trust

Ratting on each other

Too much time away from job

One year later

I think it is a good process

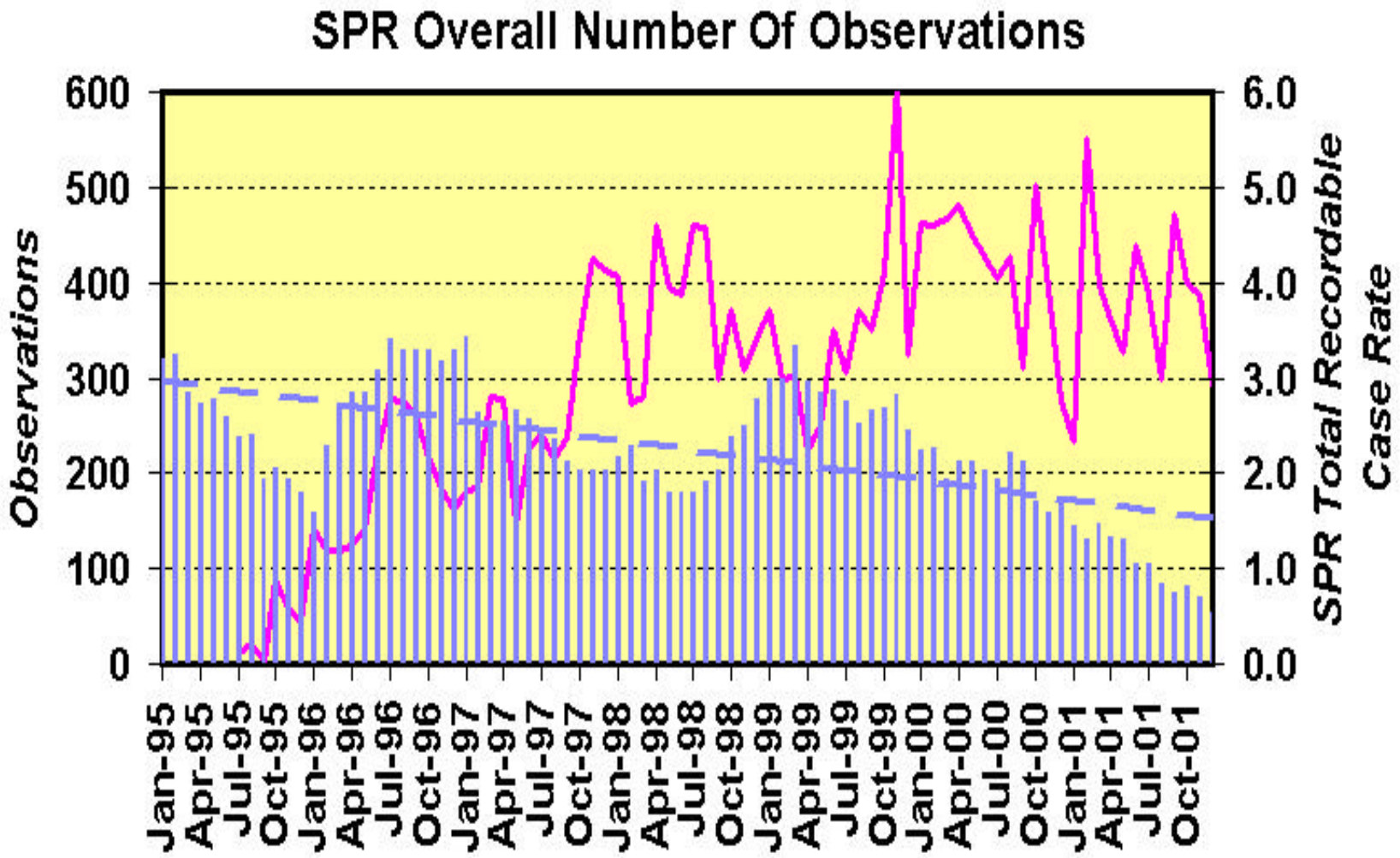
Has helped employee safety awareness

Process is working and does make sense

It is a lot of work but is worth it

I am surprised where the support we get comes from

Still trying to figure how I have time to make it work


SPR Overall Number Of Observations
Observations
SPR Total Recordable Case Rate
600
500
400
300
200
100
0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
Jan-95
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